

Work Order ID 57483

April 7, 2010 11:04:18 AM



Page 1

Item ID: D350-591-113

Accept



Setup Start



Revision ID:

Item Name: Heli-Access-Step, Short

Stop



Start Date: 07/04/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 16/04/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date: 10-11-07

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2310

Rev D

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D350-591-113

CHG004

*2 put new holes on 5/6/10
5/10/10*

6 10/6/12

110

0.00



Large Fab

Memo

0.00

Large Fab

1-Cut D2244 extrusion to 62.00" long as per Dwg D2310 2-Drill extrusion as per Dwg D2310 using drill Jig DT8230 3-Deburr

10.04.13

Large Fab

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8 10/04/13

4

(+4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Dart Aerospace Ltd

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

10-04-13

4

P

170

Large Fab

0.00



Large Fab

Memo

0.00

Large Fab

1-Rivet as per Dwg D2310 2-Inspect for foreign object as per QSI 024 3-Weld
Aft end cap as per Dwg D2310 A/R AL ROD
Batch: 1111311 4-Grind end cap welds flush

10-04-14

4

P

180

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

PD 10.04.15

W/O:		WORK ORDER CHANGES					
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Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

200

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

210

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME: 1:00pm OVEN TEMPERATURE:
1:30pm FINISH TIME: 3:20pm

⇒ 10/4/15 X2 Ø

W/O:		WORK ORDER CHANGES					
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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

220

Pressure Wash per QSI005 4.3

0.00



HandFinish

Hand Finishing

WING WALK
10.04.16 Memo *BATCH 113545*

0.00

(4) *BL 10-16-16*

230

QC3- Inspect Part Finish

0.00



QC

Quality Control

Memo

0.00

8 idb/20

xy

240

Pick Kit

0.00



Packaging

Packaging

Memo

0.00

2004/20

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Picklist Print

April 7, 2010 11:04:23 AM

Page 1

Work Order ID: 57483

Parent Item: D350-591-113

Parent Item Name: Heli-Access-Step, Short

Comments: IPP Rev:H04.11.09 Reformat KJ/JLM



Start Date: 07/04/2010

Required Date: 16/04/2010

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

K591-113  Short Step Instln Kit	CHG004	Manufactured	No			110	Each	0.0000	4.0000			
D2244-116  Step Extrusion		Manufactured	No			130	Each	17.0000	4.0000			

357484 *CLV/DO (4)*
10.04.12

Warehouse
Location

Main Warehouse

WA

38023

Loc Qty

17

17

Loc Code

D2673-34



End Plate

Manufactured No

130

Each

10.0000

8.0000

4
10.04.13

Warehouse

Location

Main Warehouse

WA

54361

Loc Qty

10

10

Loc Code

D2275



Bushing

Manufactured No

170

Each

42.0000

4.0000

4
4
10.04.13

Warehouse

Location

Main Warehouse

WA

27755

Loc Qty

42

42

Loc Code

4

W/O:		WORK ORDER CHANGES					
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Required Date: 16/04/2010

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS20600-AD4W3  Cherry Rivets		Purchased	No			170	Each	2,143.000	64.0000			

210-04-14

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST321	2143	
106375	143	
107939	1000	
111636	1000	

38
26

D2582



Step Leg Assembly

Manufactured No

250 Each 29.0000 4.0000

210-04-13

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
WA	29	
48090	2	
51343	16	
53634	11	

4

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Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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DESIGN KE	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2310	REV. D SHEET 1 OF 2
DATE 05.11.14		TITLE HIGH SHORT STEP ASSEMBLY SCALE NTS	
A	94.11.10	NEW ISSUE	
B	97.05.22	END CAPS CHANGED	
C	97.07.23	ADDED BUSHING AND FACING INFO	
D	05.11.14	UPDATE FINISHING NOTE	

D2310 HIGH SHORT STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY
D2310	High Short Step Assembly	X
D2244-62.0	STEP EXTRUSION*	1
D2275	BUSHING	1
D2582	STEP LEG ASSEMBLY	1
D2673-34	STEP END PLATE	2
MS20600AD4W3	Rivets	16 **

*cut per drawing

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 57483

BS 10-4-07

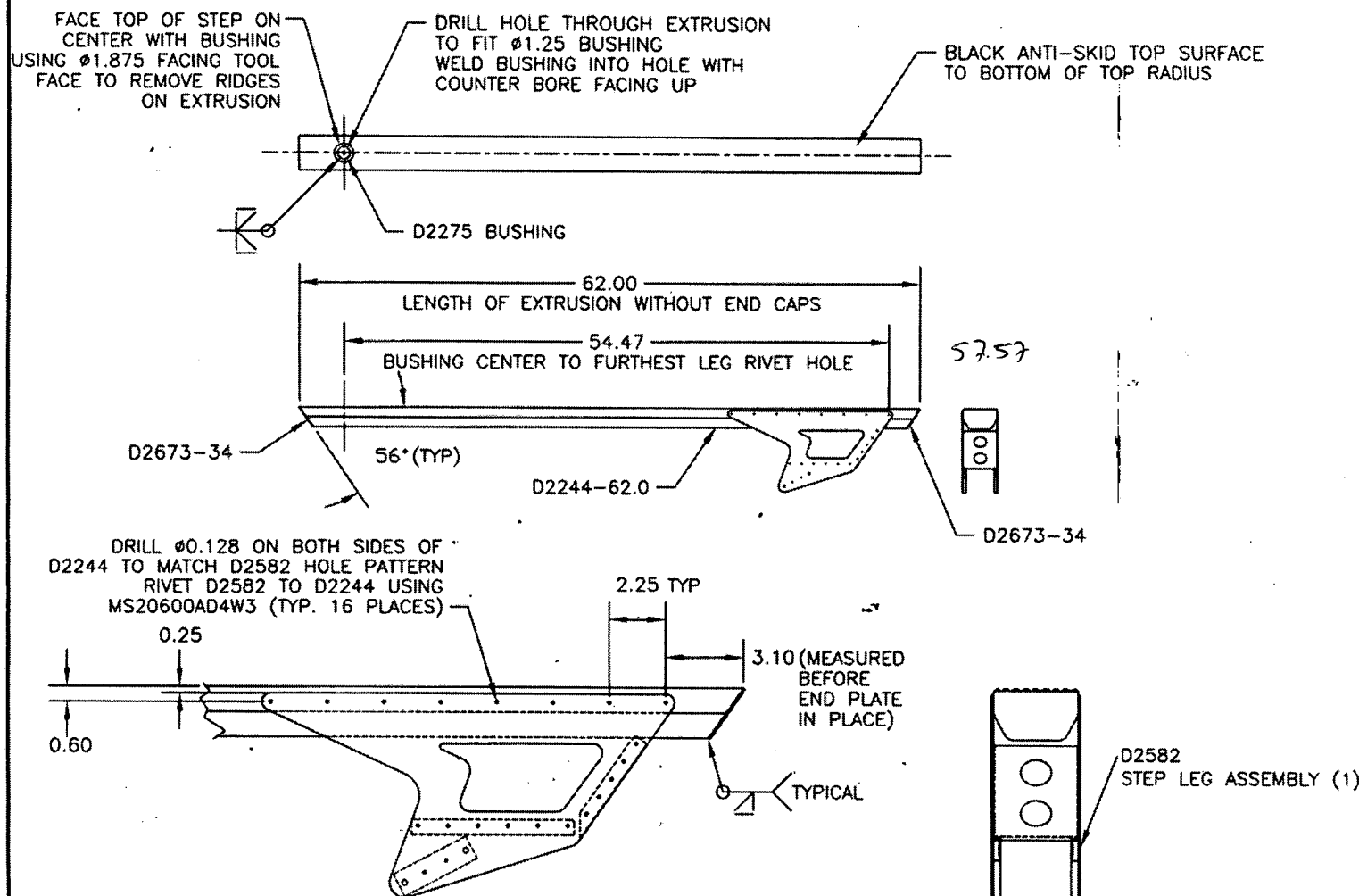
RELEASED
05.11.28 *[Signature]*

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DART

DESIGN	KE	DRAWN BY	PH	DART AEROSPACE LTD
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA
DATE	05.11.14	DRAWING NO.	D2310	REV. D
		TITLE	HIGH SHORT STEP ASSEMBLY	SHEET 2 OF 2
		SCALE	NTS	



STEP LEG DETAIL

D2310 HIGH SHORT STEP ASSEMBLY

- 1) MAKE FROM D2244 STEP EXTRUSION
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

RELEASED
05-11-28